UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,684	03/26/2004	Yang Gi Kim	LT-0055	7870

34610 7590 07/11/2008

KED & ASSOCIATES, LLP
P.O. Box 221200
Chantilly, VA 20153-1200

EXAMINER	
BRINEY III, WALTER F	
ART UNIT	PAPER NUMBER
2615	
MAIL DATE	DELIVERY MODE
07/11/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/809,684	KIM ET AL.	
	Examiner	Art Unit	
	WALTER F. BRINEY III	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 July 2008 and 16 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4,6,8,11-15,17,20-24 and 27-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *20-24 and 27-30* is/are allowed.

6)☒ Claim(s) *1,3,4,6,8,11,13-15 and 17* is/are rejected.

7)☒ Claim(s) *12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *16 June 2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

Applicant's information disclosure statement filed 16 June 2008 fails to comply with 37 CFR 1.98(a)(3) by not including a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of the Korean Office Action dated 30 October 2006 that is not in the English language. While all other references listed on the IDS have been considered, the Korean Office Action has not been considered.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 16 June 2008 has been entered. The preliminary amendment filed 01 July 2008 after the request for continued examination has also been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 1, 3-4, 6, 8 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Replay Gain – A Proposed Standard, http://www.replaygain.org (retrieved 06 August 2007) (last updated 10 October 2001) (herein *Replay Gain*).**

Claims 1, 3-4, 8 and 11 appear in Applicant's instant response as previously presented. Accordingly, these claims are rejected for the same reasons set forth in the previous Office Action. (Final Rejection 2-5, 17 March 2008).

Claim 6 is limited to a method. This claim requires a) receiving an audio file, b) checking audio level information recorded in the received audio file and c) adjusting based on the checked audio level information an output level of audio data to be reproduced of the received audio file. These three steps appear as previously presented and are rejected for the same reasons set forth in the first Office Action. (Non-Final Rejection 4, 09 August 2007). The first "wherein" clause of this claim that was previously presented in Applicant's last response is rejected for the same reasons set forth in the last Office Action. (Final Rejection 4, 17 March 2008). However, Applicant's instant reply further introduces a "wherein" clause that requires three additional substeps within the adjusting step: a) compare the checked audio level information with a predetermined reference level, b) adjust a gain of the audio data to be reproduced in accordance with the comparison result and an audio volume level set by a user and c) amplify and output the audio data to be reproduced at the adjusted gain.

In addition to including a replay gain adjustment value indicating the difference in levels between the stored audio file and a predetermined standard—e.g., 83 dB—a peak

value is stored. This peak value is also considered part of the claimed checked audio level information. See "*what to store*" on the Replay Gain Data Format page. This peak value is compared to a digital full-scale value to determine if clipping will occur just as the claimed method includes comparing audio level information with a predetermined reference level. Hard clipping/adjustment of the gain is carried out as a result of the Replay Gain comparison just as gain of the claimed audio data to be reproduced is adjusted in accordance with the comparison result. See the Clipping Prevention page for a description of how to carry out hard limiting to avoid clipping. Said clipping prevention page also indicates that a pre-amp gain must be taken into account when determining the existence of clipping. According to the Outline of Player Requirements page, a user sets the pre-amp values, which correspond to a system audio volume level. Thus, the hard clipping/adjustment of Replay Gain similarly occurs as claimed in accordance with an audio volume level set by a user. Although the Replay Gain website does not explicitly mention amplifying and output the audio data adjusted by the above described process, audibly reproducing a song is the ultimate goal o f Replay Gain, so the amplification and output process inherently occurs as claimed. Therefore, the Replay gain website in view of the Winamp v2.6 screenshots anticipates all limitations of the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 13-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Replay Gain website in view of screenshots taken from Winamp V2.6.

Claims 13, 15 and 17 appear in Applicant's instant response as previously presented. Accordingly, these claims are rejected for the same reasons set forth in the previous Office Action. (Final Rejection 5-6, 17 March 2008).

Claim 14 is limited to an article including a machine-readable storage medium containing instructions for adjusting an output level of audio data. The instructions of this article cause the following steps: a) searching a recording medium for an audio file requested to be played, b) checking audio level information recorded in the searched audio file and c) adjusting based on the checked audio level information an output level of audio data to be reproduced of the received audio file. The machine-readable storage medium limitation is rejected for the reasons set forth in the Final Rejection 5, 17 March 2008. The searching step is rejected for the reasons set forth apropos claim 13 in the Non-Final Rejection 10, 09 August 2007. The checking and adjusting steps are essentially the same as the checking and adjusting steps of claim 6 and are rejected for the same reasons apropos claim 6 set forth in the Non-Final Rejection 4, 09 August 2007. The first "wherein" clause of this claim that was previously presented in Applicant's last response is essentially the same as the first "wherein" clause of claim 6 and is rejected for the same reasons set forth apropos claim 6 in the last Office Action. (Final Rejection 4, 17 March 2008). However, Applicant's instant reply further introduces a "wherein"

clause that requires three additional substeps within the adjusting step: a) compare the checked audio level information with a predetermined reference level, b) adjust a gain of the audio data to be reproduced in accordance with the comparison result and an audio volume level set by a user and c) amplify and output the audio data to be reproduced at the adjusted gain.

In addition to including a replay gain adjustment value indicating the difference in levels between the stored audio file and a predetermined standard—e.g., 83 dB—a peak value is stored. This peak value is also considered part of the claimed checked audio level information. See "*what to store*" on the Replay Gain Data Format page. This peak value is compared to a digital full-scale value to determine if clipping will occur just as the claimed method includes comparing audio level information with a predetermined reference level. Hard clipping/adjustment of the gain is carried out as a result of the Replay Gain comparison just as gain of the claimed audio data to be reproduced is adjusted in accordance with the comparison result. See the Clipping Prevention page for a description of how to carry out hard limiting to avoid clipping. Said clipping prevention page also indicates that a pre-amp gain must be taken into account when determining the existence of clipping. According to the Outline of Player Requirements page, a user sets the pre-amp values, which correspond to a system audio volume level. Thus, the hard clipping/adjustment of Replay Gain similarly occurs as claimed in accordance with an audio volume level set by a user. Although the Replay Gain website does not explicitly mention amplifying and output the audio data adjusted by the above described process, audibly reproducing a song is the ultimate goal o f Replay Gain, so the

amplification and output process inherently occurs as claimed. Therefore, the Replay gain website in view of the Winamp v2.6 screenshots anticipates all limitations of the claim.

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

3. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 12 is objected to for the reasons set forth in the Non-Final Rejection at pp. 16-17.

4. Claims 20-24 and 27-30 are allowed

Claims 20 and 27 were instantly amended to include the allowable limitations of claims 26 and 32, respectively, as well as all limitations of any interceding claims. Therefore, claims 20 and 27 are allowable over the cited prior art.

Claims 21-24 and 28-30 are allowable based on their dependence from allowable claims 20 and 27.

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive. Concerning claim 1, Applicant alleges that Replay Gain does not disclose "recording…an output level of audio data to be reproduced" since Replay Gain stores a track relative volume adjustment. In other words, Replay Gain stores a difference between a level of

the audio data and a standard volume of 83dB. Whether the stored Replay Gain is truly an output level is irrelevant. Applicant has constructed a strawman argument in its instant remarks since the claim is not concerned with recording an output level of audio data to be reproduced, but recording an audio level information that indicates an output level of audio data to be reproduced. Accordingly, the claim specifies that a degree of separation exists between the recorded audio level information and an output level of audio data to be reproduced. This degree of separation embraces the Replay Gain track relative volume adjustment that indicates an output level of audio data to be reproduced when that track relative volume adjustment is compared to a standard volume of 83dB.

Concerning claim 6, Applicant alleges that Replay Gain does not disclose the new limitations of claim 6 regarding adjusting a gain of audio data to be reproduced in accordance with a comparison result and an audio volume level set by a user since Replay Gain merely multiplies each input sample by a constant. However, this allegation is contradicted by the instant rejection of claim 6 showing that Replay Gain includes volume adjustment based on a peak clip comparison and based on pre-amp settings.

Applicant's other arguments for the remaining claims merely restate the arguments apropos claims 1 and 6 and are similarly unpersuasive.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WALTER F. BRINEY III whose telephone number is (571)272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Suhan Ni can be reached on (571) 272-7505. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Walter F. Briney III/
Examiner
Art Unit 2615

7/14/08